

INEEL PUBLIC MEETING ON PROPOSED CLEANUP
PLAN FOR IDAHO CHEMICAL PROCESSING PLANT
(INTEC)

IDAHO FALLS, IDAHO

Monday, November 16, 1998

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PUBLIC COMMENT

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IDAHO FALLS, IDAHO, MONDAY, NOVEMBER 16, 1998

MR. SIMPSON: Welcome to tonight's meeting. I'm Erik Simpson. I am the community relations plan coordinator for the INEEL Environmental Restoration Program. And I'm going to facilitate tonight's meeting.

We're here tonight to discuss the results of the Waste Area Group 3 Remedial Investigation/Feasibility Study and then also to discuss the proposed plan. For those who don't already know, Waste Area Group 3 is the environmental restoration program designation for the Idaho Nuclear Technology and Engineering Center, or what some people formerly called the Chem Plant.

This is the fifth facility-wide environmental investigation that we've completed at the INEEL, and we have four more to go under our Federal Facility Agreement and Consent Order. And since this is really, probably, the most complex site that DOE, EPA, and the state have investigated, the agencies have agreed to extend the comment period an additional 30 days, so now the comment period will end on December 22nd.

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The last time we held public clean-up meetings in Idaho Falls was in February of this year when we were discussing the Test Area North Remedial Investigation/Feasibility Study and proposed plan. At the request of our stakeholders and the citizen's advisory board, we revised that document, and it is being rereleased for public comment this month. For those who would like a copy of that document, see me at the break, and I'll get your address and get you a copy.

At the back of the room, we have several supporting documents. We have the Waste Area Group 3 proposed plan. We have fact sheets. We have the meeting presentation, copies of the slides. We have the Federal Facility and Consent Order, which outlines all these clean-up projects, and I have some community relations plans as well.

At this time I would like to review the agenda with you. First, we're going to have the presentation and then we will have a question-and-answer session. And since we have kind of a lengthy presentation, I would like to hold off on any detailed questions until the actual question-and-answer session. So, really, if you could just limit your questions to points of

1 clarification, maybe, an acronym that you're not
2 familiar with. But if a question does come up that
3 the presenter can't immediately answer, I will
4 write it on a tablet up here or you can write it on
5 a tablet in the back of the room. I also have some
6 cards at the back table where you can also jot down
7 your question, and we'll get to those during the
8 question-and answer session.

9 Following that session, we will have
10 the formal comment session where your comments are
11 entered into the record. And we have a court
12 reporter here tonight who is recording all portions
13 of this meeting. Also you can submit your comments
14 in writing, and we have several forms here tonight,
15 postage-paid forms that will allow you to write
16 your comment and fold the comment and place it in
17 the mail, and we'll get the comment.

18 Also there are comment forms at the back
19 of the proposed plan, postage-paid comment forms.
20 And also I have a tape recorder here tonight, so if
21 somebody doesn't want to make a comment in front of
22 a group of people, they can log a comment on the
23 tape, and I'll have it transcribed.

24 I should also mention at this time that
25 we have a brief survey on the back of the agenda.

1 Please take a few minutes after the meeting and jot
2 down your impressions. This will really help us
3 focus on improvements that we may need to make for
4 future meetings.

5 At this time I would like to introduce
6 the presenters -- or the principals who are
7 here tonight. With the Environmental Protection
8 Agency, Region 10 Seattle, we have Wayne Pierre.
9 And Wayne will give an overview of the project, and
10 he'll talk about the Tank Farm, which is one of the
11 primary contributors to contamination at the
12 INTEC.

13 We have Talley Jenkins, who is the
14 project manager for the Department of Energy. And
15 Talley will discuss soils under buildings and
16 structures, other surface soils, the SFE-20 tank
17 system and buried gas cylinders.

18 Next to Talley we have Scott Reno.
19 Scott is with the State of Idaho, Department of
20 Health and Welfare, Division of Environmental
21 Quality. He was also instrumental in drafting this
22 proposed plan, and he was involved in the
23 investigation of INTEC. And he will discuss the
24 perched water and the Snake River Plain Aquifer.

25 At this time I would like to turn it

1 over to Wayne Pierre.

2 MR. PIERRE: Thanks, Erik.

3 As Erik mentioned, my name is Wayne
4 Pierre. I'm with the Environmental Protection
5 Agency. Scott Reno and Talley Jenkins, we're
6 actually going in the order of I'll give an
7 overview presentation, followed by Talley. We'll
8 talk about the soils, and then Scott will do
9 cleanup and discuss the other facilities.

10 Erik mentioned or discussed why we're
11 here. Again, we are here because we do need public
12 input. The alternatives that we have identified,
13 the alternatives that we believe are preferred, may
14 not be the same as you think.

15 We have a lot of assumptions in how we
16 made our decisions, and we would like to have your
17 input on this. One of the things I should mention
18 is everyone in the back, for those who can't see,
19 can read along with this presentation. Also in the
20 back I would ask that folks get a copy of the
21 proposed plan. There are still copies in the
22 back.

23 One of the things, when people look at
24 cleaning up the Department of Energy facilities,
25 questions often come to mind, why does it cost so

1 much to clean up this type of hazard. It didn't
2 cost that much to create the hazard, but oftentimes
3 it costs hundreds to thousands of times more to fix
4 it.

5 Radioactivity -- and I know that there
6 is a lot of debate on what levels are safe, but the
7 levels that we look at for dealing with radioactive
8 contamination is orders of magnitude lower than the
9 numbers that we look at for dealing with chemical
10 contamination. We're trying to address those small
11 quantities of radionuclides and the extra safety
12 that is involved.

13 Why do the agencies want the public's
14 input? Again, one of the nine criteria that we
15 will talk about later is community input. We need
16 to know how you feel, the folks who will be living
17 close to the cleanup, whether or not it makes sense
18 to you, whether it makes sense to build a disposal
19 facility on site, whether it makes sense to spend
20 this kind of money, whether it makes sense to have
21 contingency actions, all those things that we will
22 be talking about today, we would like to have your
23 input on that.

24 I guess, last but not least, why is the
25 proposed plan so complicated. It's over 50 pages

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1 long. This is a very complicated facility. This
2 is the facility where the Department of Energy
3 dissolves fuel rods. It's the facility where the
4 Department of Energy stores high-level waste. This
5 is the facility where, at least since 1952, there
6 have been numerous spills and a lot of contaminated
7 soil. And to try to explain that, we've explained
8 that in these documents -- tried to condense that
9 into this proposed plan.

10 So I hope you bear with us as you read
11 it. You can get access to these documents at the
12 technical library. Is this available right now on
13 the Internet? You can also get it looking at INEEL
14 dot World Wide Web.

15 Many of you here already know the
16 background of INEEL. Again, operations started in
17 '52. The Idaho National Engineering and
18 Environmental Laboratory is on the national
19 priority list. I'm going to skip over some in the
20 interest of time. If somebody would like me to go
21 back to it, please let me know or read along.

22 As placing the INEL -- I have a tendency
23 to keep calling it INEL, I hope you will bear with
24 me. I haven't gotten used to the double E on
25 INEEL -- identified that we felt and the

1 determining acceptable risk. Therefore the
2 Superfund program, which is defined by the National
3 Contingency Plan, the objectives are to provide an
4 analysis of the baseline risk to provide a basis
5 for determining levels of chemicals, to include the
6 radionuclides that can be made on site, to provide
7 a basis for comparing the potential health impacts
8 for each of the alternatives that we have
9 identified, and then provide a consistent process
10 for evaluating, documenting the public health
11 threats. The consistency is not just within the
12 site. It's consistency among sites. It's
13 consistency between federal facilities and private
14 sites. So it's a national consistency that we
15 attempt to achieve through this process.

16 One of the things that we look at in
17 determining risk is future use scenarios. What
18 will happen to the Idaho National Engineering and
19 Environmental Laboratory as we look down the
20 years? It's easy to say what INEL will look like
21 today and what it will look like 10 years and what
22 it will look 30 years from now, but as you go
23 further out in time, the risk potential, as has
24 happened for many Department of Defense facilities,
25 that the INEEL may leave the government hands and

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1 Environmental Protection Agency was taking turns
2 that there were hazards at this facility that did
3 require urban investigation. And as Erik
4 mentioned, in the process of remedial investigation
5 feasibility studies that we have concluded to date
6 in all of them, some action has been warranted at
7 each of the Waste Area Groups. The Idaho Chemical
8 Processing Plant is one of 10 waste area groups at
9 INEL.

10 Again, referring to the proposed plan,
11 if you take a look at Table 11, you can get a quite
12 overview of what the groups are that we're talking
13 about. Table 11 is in the back of the proposed
14 plan. What the groups are that we're talking
15 about, the seven groups, the types of monies that
16 we're talking about and what the preferred
17 alternative is.

18 I should mention that in the 95 sites
19 that we looked at, the majority of those sites did
20 not require further action. Forty sites did. And
21 the bases for that has to do what is considered
22 acceptable risk. In this case, termed unacceptable
23 risk. Let me talk a little bit about the question
24 of risk assessment. And every agency, even in my
25 agency, each department has different ways of

1 may wind up, in part, being using for residential.

2 That potential residential is one of the
3 scenarios that we looked at that assumes that there
4 may be a household. There may be a basement that
5 is constructed. The soil that is the low grade
6 would be excavated and brought to grade and that
7 plants and vegetables would be growing on that
8 property and families with children would be living
9 on the property. That is the residential scenario
10 that we looked at for the future.

11 The risk assessment that we performed
12 for human health, carcinogenic potential, the
13 numbers that we would use would be one increased
14 tumor in 10,000-fold population. These numbers and
15 these cancer slope factors that we divide from are
16 based primarily on animal studies. For EPA we
17 treat radionuclides and chemical risk the same. We
18 look at a health base number, and we use that
19 number for determining what the risk may be.

20 Once we've decided that there is
21 unacceptable risk, and where these seven groups
22 that you see on those boards around you, we decided
23 there is a potential unacceptable risk in each of
24 them, then we go to what is referred to as a
25 feasibility study. First, we identify the

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1 objective. What are we trying to achieve? What
2 we're trying to achieve is to make a site an
3 acceptable risk, so whether or not an alternative,
4 can we take a risk that if we do nothing, we find
5 that unacceptable, and by doing something, that
6 residual risk now makes it acceptable to human
7 health and the environment.

8 Once we've identified these objectives,
9 then we look at alternatives that can meet those
10 objectives. We analyze each of the individual
11 alternatives to see how they fare against what we
12 can call the nine criteria, which I will talk about
13 in the next slide. Then we also compare between
14 the alternatives to see which one best meets the
15 criteria.

16 The nine criteria that we look at, we're
17 evaluating alternatives which are: Thresholds,
18 that is, it must be protective and must comply with
19 the law. The balancing, which are technical, those
20 five criteria round out our understanding of how
21 well the proposed alternative or the alternative
22 that we're evaluating, how implementable it is,
23 whether or not in trying to implement the remedy,
24 for example, for some facilities the remedy may be
25 on-site incineration. Is the on-site incineration

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1 more hazardous than the contamination present in
2 the soil that is on the site? So then we look at
3 the short-term risk to the community, to the
4 workers, to the environment. We look at our
5 implementables. What is the availability of the
6 materials, of the administrative implementability
7 of the project? And, obviously, we do look at the
8 cost of the project.

9 The modifying criteria, there are two
10 and the reason that it is listed in this order is
11 based more on timing than anything else. The first
12 thing that we have to do is find alternatives of
13 past threshold. The second thing is, we do a
14 technical evaluation, the balancing criteria, then
15 we seek -- as DOE, working in a team, we have state
16 EPA input, we have other stakeholder input and as
17 meetings like tonight and in public comment periods
18 that, as we're presently in, we seek the community
19 input.

20 So with that knowledge, then, one of
21 the first groups we're looked at is the Tank Farm
22 interim action. Again, as I mentioned, the Tank
23 Farm operation started in 1952. There are 20
24 underground tanks and they range in size from
25 18,000 gallons to 300,000 gallons.

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1 A picture of the Tank Farm. This area
2 is the stack for orientation and this is the Tank
3 Farm area. This is a showing of construction of
4 some of the tanks. This is the grade area over
5 here. These tanks are all below grades, about
6 10 feet of dirt that sits on top of these tanks.
7 The tanks were constructed on the bedrock.

8 So what we need to talk about are two
9 things: what we know and what we don't know,
10 because there is a lot about all of these sites
11 that we don't know. We do know there is
12 approximately a 146,000 cubic yards, based on
13 what we know, as far as releases. We know that
14 concentrations, at least in one spot, based on one
15 report, can be as high as 400 R per hour. We know
16 that some of the concentrations that we detected,
17 for example, this number here, if people are
18 familiar with what the Department of Energy refers
19 to as their transuranic waste, that criteria is 100
20 nanocuries per gram, so we do know that some of
21 these concentrations qualify as transuranic
22 wastes.

23 We know that most of the radionuclide
24 contamination in the Chem Plant is located in the
25 area of the Tank Farm soils. Most importantly, we

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1 know that by doing nothing there is run-on, there
2 is precipitation that is moving into the Tank Farm
3 that is driving these contaminants that are in the
4 soil further down in the unsaturated zone and into
5 the perched water and into the Snake Rive Plain
6 Aquifer.

7 What don't we know? We really don't
8 know how the Tank Farm will be closed. We know the
9 Tank Farm is currently scheduled to be in operation
10 until 2015. We know that we've expected the
11 Tank Farm will undergo closure by 2018.

12 There is an environmental impact statement being
13 developed and there will be a closure plan that the
14 Department of Energy will be submitting to the
15 state with the closure of this Tank Farm. This
16 Tank Farm -- besides the fact that it's high-level
17 waste is also hazardous waste, so that term is
18 usually combined to declare it to be mixed waste,
19 and that will have to undergo a closure, but
20 whether or not the tanks will be emptied and
21 removed, whether they will be emptied and dropped,
22 whether some other technology will be done, we
23 don't have knowledge of that at this moment.

24 We also don't know how quickly and to
25 what amount some of the contaminants that are

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1 present in the soil at the Tank Farm are moving
2 into the aquifer. For example, plutonium is
3 very -- the movement of plutonium is very dependent
4 upon the pH of the soil, the oxidation state of
5 plutonium and other parameters that we hope to
6 obtain more information on. We don't really know
7 all the spills and the locations of the spills.
8 And it's also a moving target because as we talked
9 about, there may be more spills. So we may never
10 really know all the locations of the spills at the
11 tank farms, including the Tank Farm until we take
12 final action.

13 So, as I mentioned before in how we
14 evaluate alternatives, the first thing that we look
15 at are the objectives and we know that we want to
16 protect the drinking water aquifer. We know that
17 we would like to do filtration for the contaminated
18 soils. We know that we would like to introduce
19 filtration for the contaminated soils. We would
20 like to prevent worker contact -- to ensure that
21 worker contact is prevented by DOE action. And we
22 know that we need to collect more information on
23 the things that we don't know.

24 From that -- from those objectives,
25 we've identified three remedial alternatives. The

1 and the Hazardous Waste Closure Program and the
2 Federal Facility Agreement and Consent Order all
3 work together to achieve one solution for the Tank
4 Farm.

5 With that, unless there is some
6 clarifying questions, I would like to introduce
7 Talley Jenkins.

8 AUDIENCE MEMBER: So, basically, you're
9 saying that Alternative 3, by the time you learn
10 more about the best way to clean up the facility?

11 MR. PIERRE: If we were to -- one of the
12 things that we don't want to do in an interrupt
13 action is to do something that is going to
14 interfere with the final. If the Tank Farm -- if
15 the decision was made to take the contents out and
16 to close the Tank Farm in place, the shells of the
17 tanks, we would still be obligated to prevent
18 run-on and percolation of water through the sites,
19 so that makes sense.

20 If the decision was made to remove the
21 contents and remove the tanks, there may be quite a
22 few years that would go on, maybe up to 2035 before
23 that would actually happen. If that was the case,
24 trying to prevent run-on, trying to minimize the
25 water or take the water, which is currently

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1 first one is always placed as a baseline. That is,
2 what if we did nothing? What if we just let things
3 go as they are? That is the No Action Alternative.
4 Alternative 2 is actually institutional controls
5 with additional monitoring. Alternative 3
6 involves -- Alternative 2, the institutional
7 controls and surface water controls.

8 Now, based on the objectives that I
9 mentioned earlier, Alternatives 1 and 2 really do
10 nothing about the Snake River Plain Aquifer and
11 protecting from leaching of these contaminants.

12 Alternative 3, based on what we have
13 been looking at, has the ability of reducing the
14 run on -- the rainwater, the percolation of water
15 in the Tank Farm, by 80 percent. So by reducing
16 the amount of water running through the Tank Farm,
17 we also reduce the potential for leaching of those
18 contaminants into the Snake River Plain Aquifer,
19 and, at the same time, we give ourselves time to
20 collect more information, to have a better
21 understanding of the potential migration of
22 contaminants like plutonium. We also give
23 ourselves a better opportunity to understand how
24 the Tank Farm will be closed and how the governor's
25 agreement and the Environmental Impact Statement

1 infiltrating to 20 percent of that number, makes
2 sense. So what we're doing is a decision -- or
3 what we're proposing is a decision that we think
4 makes good interim sense. It doesn't interfere
5 with the final, and it may give us some protection.

6 AUDIENCE MEMBER: Can you give us a
7 summary of the measures that you will take to
8 control the run-off?

9 MR. PIERRE: Yes. I can give what is
10 used at this time, recognize at this point we're
11 talking about technology talk, which is a general
12 statement, and as we go through the remedial
13 design, we go into more specifics. So the
14 obligation is to control the run-on and percolation
15 by 80 percent. That is a lot of water. The steps
16 that we will have to take is surface sealing of
17 the soil. Steps that we will have to take is
18 preventing flooding from the Big Lost River,
19 redirecting the drains on buildings, potentially
20 other activities, but those would be some examples.

21 AUDIENCE MEMBER: You said earlier in
22 your presentation that the contaminants would go
23 through the soil into the aquifer and eventually
24 come out in the Snake River, perhaps, around Twin
25 Falls. Do you have any evidence at all that shows

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1 that something will come out of the aquifer at Twin
2 Falls?

3 MR. PIERRE: No, actually, I never said.

4 AUDIENCE MEMBER: I thought you did.

5 MR. PIERRE: I said it would go into the
6 aquifer. As far as where that goes, we have no
7 reason to believe, at this time, that contaminants
8 would exceed the Safe Drinking Water Act beyond the
9 INEL boundaries.

10 AUDIENCE MEMBER: That isn't what I --
11 that's all right.

12 One other thing that you said that the
13 movement of plutonium would depend highly upon the
14 PH of the soil.

15 MR. PIERRE: That's one of the factors.

16 AUDIENCE MEMBER: That's one of the
17 factors. Could you explain why an acidic soil or a
18 basic soil would accelerate plutonium through
19 there?

20 MR. PIERRE: Actually, I would defer
21 that to others in the audience. One of the things
22 that we're looking at with PH conditions may be
23 that the contaminants will be more soluble or that
24 there will be less salting out, would be one. In
25 other words, other contaminants, which would

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1 minimize some the solubility, would be either
2 dissolved or precipitated out, is one aspect.
3 Nitric acid is also an oxidizer. It's one of the
4 acids that we're dealing with, but that can change
5 the oxidation state of the metal. Those would be
6 two aspects of it. It's outside of my field, so I
7 don't want to go into any detail. I don't know if
8 we have anybody in the audience who is good at --
9 we'll talk more about it later.

10 Any other clarifying questions?

11 MR. JENKINS: Thank you, Wayne. I'm
12 going to talk about the contaminated soil sites.
13 What we have under what we're calling the Group 2,
14 or soil under buildings, are four sites.

15 The first one is a French drain.
16 Basically a dry well that we dumped water into
17 underneath the 603 complex. This drain was used
18 prior to construction of the dry site. When they
19 constructed this, they actually dug down and took
20 part of it away. The second site -- we have two
21 sites underneath the 604. The first one was where
22 they found contaminated liquid underneath one of
23 the liners in one of the hot cells. The second one
24 was when they were building a fire escape exit,
25 they actually dug through some contaminated soil.

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1 The fourth one within this group is a
2 steel liner that corroded away and dumped
3 radioactive liquid waste into the soil beneath the
4 601 complex.

5 That's what we know. What we don't
6 know, we really don't know what D&D is eventually
7 going to do to these facilities. They could look at
8 anything from complete removal of the facility to
9 complete entombment, i.e., turning it into a giant
10 block of concrete.

11 We also don't exactly know if the
12 structure would act as a long-term cap, but we do
13 know that it is, right now, as long as it's in
14 place -- actually kind of acting as a cap would,
15 which is minimizing the infiltration.

16 Based on this, the agencies believe that
17 a deferred action is warranted, i.e., this would
18 be that we wouldn't take an active remediation
19 on these four sites until the D&D has been
20 completed. By D&D I mean the deactivation, the
21 dismantlement, the decommissioning, or any other
22 activities associated with closure of these
23 facilities.

24 Again, our objective in this one is
25 primarily protection of the aquifer and protection

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1 of future workers in that there is no access right
2 now to these contaminated soils.

3 Again, we looked at a range of
4 alternatives, No Action for comparison purposes.
5 In a containment this would be placing a cap over
6 the facility or over that contaminated soil, all
7 under D&D.

8 Alternative 3, which is actually
9 excavation and disposal of contaminated soil, is
10 contingent on the D&D removing the facility.

11 Again, we think one of the likely
12 outcomes would be that D&D, entombed in place. We
13 have one facility right now undergoing that kind of
14 an approach and that is the old calciner facility.
15 We also believe that Alternative 2 would provide
16 intrusion, protection, and infiltration protection
17 for about a thousand years. This would allow the
18 contamination that is present to essentially decay
19 away in place. Based on this, Alternative 2 is the
20 agencies' preferred alternative.

21 The next group is what we're calling
22 other surface soils. This is basically a group of
23 20 sites that were anything from spills,
24 intentional discharges of radioactive liquid
25 waste, based on the accepted practice at the time.

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1 Decontamination fluids, storage of contaminated
2 equipment and contamination that leaked from
3 there. And we also have some soils that have been
4 cleaned up and stuck into boxes.

5 What we know. We have 20 sites that are
6 contaminated with primary radionuclides. There are
7 some metals, and each of these sites present an
8 unacceptable risk. The contamination on these
9 sites generally range from surface, i.e., a couple
10 of feet in depth, all the way, in some cases, down
11 to 40 feet, the top of the basalt.

12 Based on what we know, we estimate that
13 we have 82,000 cubic yards to deal with. However,
14 we don't have a real good handle on horizontal and
15 vertical extent, in that, when we went and sampled,
16 we actually looked at the hot spot where the
17 release was at and didn't try to get the extent of
18 the plume. So this gives us an uncertainty on the
19 volume. In addition, with some of these sites
20 having contamination at depths greater than 10
21 feet, which is the basement scenario we have looked
22 at for the clean-up scenario, we may have
23 unacceptable leachable concentrations below that
24 which would drive us toward excavating to a deeper
25 depth, which would also increase the volume.

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1 Based on these, we believe that remedial
2 action is warranted. Again, primary purpose to
3 protect the aquifer and prevent an unacceptable
4 risk from a surface exposure.

5 Again, we looked at a variety of
6 alternatives anywhere from no action, institutional
7 controls. This would, essentially, be restricting
8 access to these areas. Alternative 3 is to place a
9 containment structure, i.e., a cap over each of
10 these release sites.

11 The last two that we evaluated were
12 excavation, treatment, if necessary, and either
13 on-site or off-site disposal. I don't know how
14 many people have heard about it, but we have been
15 talking about an on-site disposal facility. The
16 on-site disposal facility is under 4A. This is
17 a -- the best way to think is like a module-like
18 approach. For this plan we would be constructing
19 the cell capacity necessary to implement this
20 remedy, but it would be designed in such a way as
21 the other future CERCLA decisions to expand the
22 capacity if necessary.

23 This facility would be RCRA compliant,
24 but not a RCRA facility, i.e., it would meet all
25 the requirements of RCRA from a substance

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1 standpoint but not administrative, i.e., we
2 wouldn't get a permit.

3 4B is removal, treatment, and off-site
4 disposal. This is where we evaluated sending it to
5 a commercial facility for ultimate disposal.

6 I'll just skim down. 4B has some
7 increased short-term risk, i.e., because of the
8 treatment to get it acceptable for off-site
9 shipment, we have a higher treatment cost and more
10 worker exposure.

11 4A, we would essentially be doing
12 something similar to 4B except it would be on site,
13 but we would still be disposing of it in a facility
14 designed for acceptance of that kind of material.
15 Based on this, the agencies believe that 4A is the
16 preferred alternative.

17 SFE-20 tank is an underground tank, this
18 being grade level. This is below 10 feet. This
19 being the tank down here. What we have is a tank
20 that was used to collect radioactive liquids from
21 1957 to about 1976. In 1976 we cut and capped the
22 lines and, basically, abandoned the tank in place.
23 What we know is that there are various radioactive
24 constituents in there, primarily cobalt, cesium,
25 strontium along with some plutonium and Eu and

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1 Pu isotopes.

2 If we do nothing, eventually the
3 contamination would leak out of the tank and
4 the tank contents would eventually reach the
5 environment, which could eventually, at some point,
6 reach the aquifer. What we don't know is actual
7 concentrations of the contaminants within the
8 liquid or the sludge and that we have about
9 400 gallons of liquid and about 55 gallons of
10 sludge.

11 Based on this, the agencies believe
12 remedial action is warranted. This would prevent
13 contamination of the aquifer. Again, we looked at
14 a variety of alternatives, anywhere from a No
15 Action to Alternative 4, which is complete removal,
16 treatment, and disposal.

17 Alternative 2, basically, fills or
18 entombs the facility in place, fills the tank
19 the rest of the way full with concrete and
20 the structure.

21 Alternative 3 is similar to
22 Alternative 2 with the exception that we would
23 remove the liquid prior to grouting and the liquid
24 would be treated.

25 Alternative 4 would remove the liquid,

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1 treat it, remove the sludge, treat it, and
2 dispose and remove the structure, the piping
3 and the associated facility and dispose of it
4 appropriately.

5 Based on that, the agencies believe that
6 Alternative 4 is what we are calling our preferred
7 alternative.

8 Group 6 are the buried gas cylinders in
9 two isolated areas outside of the facility. One
10 over here by the river, Lincoln Boulevard, and the
11 other located kind of northeast of the facility.
12 This one over here was basically construction gas
13 cylinders that were basically disposed of in a pit
14 or a trench when they completed construction of the
15 Chem Plant. We believe there are between 40 and
16 100 buried gas cylinders. These are cylinders
17 that have acetylene or oxygen or carbon dioxide
18 that are used in welding, cutting operations.

19 In the case of the other one, Site 94,
20 we have four cylinders that are suspected of
21 containing hydrofluoric acid. That's what we
22 know. We do know or suspect that if we do
23 nothing, we would have a potential for a fire or an
24 explosion, in that, at some point, these contents
25 would be released. What we don't know is exactly

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1 what was buried along with the containers or how
2 much pressure is in those containers.

3 Based on this, we believe that action is
4 warranted. This would reduce the safety hazards
5 associated with these two sites. We looked at
6 three alternatives. Again, our No Action that we
7 compare everything against, our removal and
8 treatment and disposal action. This would
9 essentially excavate the cylinders, stick them
10 in a containment facility, release the gases,
11 treat the gases, and then dispose of the cylinders
12 appropriately. And the third one would be a
13 containment, to place a cap over both of the two
14 sites.

15 Based on these, Alternative 2, like I
16 said, remove it, but there is a safety concern
17 any time you're dealing with pressurized gas
18 cylinders. We still believe that Alternative 2 is
19 the best thing that we can do for that. Any
20 clarifying questions before I turn it over to Scott
21 Reno?

22 AUDIENCE MEMBER: Soils under the
23 buildings, obviously, got to be tied into decon, et
24 cetera, the buildings. How do you guys tie into
25 that or have they, for example, begun to address

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1 deconing of the facilities, the soil, which you're
2 now starting to talk about?

3 MR. JENKINS: That was part of the
4 reason I said the preferred action was
5 appropriate. We don't really know that -- there
6 are plans right now. They are gearing up for
7 deconing or starting to decommission the 601
8 facility. The 604 facility will probably be around
9 for the next 20 years or so. 603, we're supposed
10 to have the fuel out of there by 2035. So what we
11 really have is facilities that are going to be
12 around for a very long time. We don't know what
13 they're actually going to end up with, but we
14 believe, at this point, the structure is acting as
15 a cap and the contamination beneath it is not
16 leaching.

17 AUDIENCE MEMBER: So you would pursue
18 that even with those dirty facilities above it?

19 MR. JENKINS: We would -- let's say that
20 they decided to entomb the 601 in place. What we
21 would try to do is make sure that whatever
22 entombment they did was protective enough that
23 whatever cap we came up -- we wouldn't have to
24 build a lot of cap over that area. It's one that
25 we're really going to have to have a big issue on

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1 that one.

2 AUDIENCE MEMBER: Coordination is.

3 MR. JENKINS: Coordination is a big
4 issue on that one.

5 AUDIENCE MEMBER: If I might, one more
6 question. The new engineered facility, that's what
7 we don't need more of, which we're going to process
8 this stuff and get a new facility and contaminate
9 it. That would be a constructive comment, I
10 think. A new engineered facility, my goodness.

11 MR. JENKINS: Oh, you meant from the
12 soils to obviously become contaminated.

13 AUDIENCE MEMBER: Yeah.

14 MR. JENKINS: Maybe I confused you
15 there. What we're talking about is a landfill. It
16 wouldn't have to be deconed afterwards. What
17 we're talking about is excavating a hole in the
18 contaminated area. We would put clay in the
19 bottom, then we would put a couple different layers
20 to collect the leachate, a little bit of soil above
21 that, then we would actually start hauling the
22 contaminated soil on top, and that the cap would be
23 placed over the top of that on that.

24 AUDIENCE MEMBER: Not necessarily a
25 structure then?

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1 MR. JENKINS: No, there wouldn't be a
2 typical structure.
3 AUDIENCE MEMBER: Could you give me the
4 dates again.
5 MR. JENKINS: I believe in the case of
6 601, we're starting, that is, started to wrap up a
7 little bit. It's one of the issues that we will
8 deal with be under the EIS. We will make some kind
9 of a decision on that in the near term, i.e., in
10 the next couple years. In the case of the PEW, the
11 604 complex, that is one that we're still using to
12 treat waste, so it could be around for the next
13 20 years or so. And 603, we know that we have to
14 have the fuel out of there by 2035. That is not a
15 bad date to pick from.
16 AUDIENCE MEMBER: Will all three
17 buildings, D&D decisions be made in the EIS?
18 MR. JENKINS: I'm not sure on that.
19 Tom?
20 MR. WICHMANN: I'm Tom Wichmann with the
21 Department of Energy. We will analyze the impacts,
22 the alternatives, Beatrice, but I do not know if
23 those decisions will be made at this time back on
24 the plutonium. We will look at the impacts, but I
25 don't know what is in the people's minds back

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1 East.
2 We will certainly look for public
3 comment. If the public feels strongly that those
4 decisions should be made, let us know. That will
5 help. But we are going to look at the impacts.
6 AUDIENCE MEMBER: The impacts of D&D; is
7 that correct?
8 MR. WICHMANN: Yes.
9 AUDIENCE MEMBER: The contents of these
10 cylinders that you're talking about, what kind of
11 gas? Any radioactive gas?
12 MR. JENKINS: No.
13 AUDIENCE MEMBER: You said there was a
14 potential for fire and explosion hazard due to a
15 eventual deterioration. You seem concerned that we
16 have to take those up. Won't the hazard be greater
17 as we took them out rather than leave them there?
18 MR. JENKINS: To excavate them, it is a
19 higher short term, i.e., a worker risk than the
20 risk to the worker would be if we left them in
21 place. However, there are companies out there that
22 do this for a living. We wouldn't just go in,
23 mucking and trucking.
24 AUDIENCE MEMBER: One other question on
25 that. Is there not literally millions of these

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1 tanks around the nation used for all kinds of
2 industry that are sitting out there unprotected?
3 And so why are we so concerned about these that
4 are buried, if they have the same kind of gases
5 that we can go down to the store and buy?
6 MR. JENKINS: Basically, what we have
7 here is a dump, in that when they actually went out
8 and were constructing -- at least for the acetylene
9 and oxygen cylinders, there was a nice convenient
10 hole and they just buried them. They have flooded
11 out once before. They were washed out when the Big
12 Lost River flowed in the '57, '58 time frame.
13 AUDIENCE MEMBER: Have any injuries
14 occurred?
15 MR. JENKINS: No, none that I'm aware
16 of.
17 AUDIENCE MEMBER: One other comment I
18 may make -- if I may?
19 MR. JENKINS: Yes.
20 AUDIENCE MEMBER: It would be helpful to
21 have page numbers on here.
22 MR. JENKINS: Oh, okay.
23 AUDIENCE MEMBER: On the hydrofluoric
24 acid tanks, since they are several hundred yards
25 from the facilities, why not just let them

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1 deteriorate and explode one by one? What is the
2 problem with that?
3 MR. JENKINS: Does somebody want to
4 answer that one?
5 MR. JAMES: If I could help out a little
6 bit, Tally. This is Bob James with Lockheed,
7 Lockheed-Martin. I think the issue with the gas
8 cylinders is probably over a short period of time a
9 greater risk by retrieving them, but we know when
10 that risk is going to occur so we can manage it.
11 If we leave them uncontrolled, the way to bet is
12 that they will fail when no one is around but there
13 is no way to guarantee that. If we actively go out
14 and retrieve them, we can define when that risk
15 will occur and we can takes steps to mitigate the
16 risk. If we leave them alone, there is not telling
17 what might happen.
18 AUDIENCE MEMBER: How long have those
19 tanks been in the ground?
20 MR. JAMES: One group since the '50s,
21 the group that is by the river. And the compressed
22 gas cylinders were required to be hydrostatically
23 tested every five years. And hydrotesting in the
24 early '60s, wasn't it?
25 AUDIENCE MEMBER: No, 1956.

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1 MR. JAMES: We have no idea, really,
2 what the condition is or what the deterioration
3 rate may be.

4 MR. SIMPSON: Can we hold off on some of
5 the questions until we get through. I know there
6 is a great interest in hearing Scott's portion of
7 the presentation. We talked about water. Can we
8 hold off on some of these.

9 MR. RENO: I want to thank you for the
10 good turnout tonight. We've been working on this
11 for a long time, and I think that you can see how
12 complex this project is and how many different
13 angles and different nuances it has.

14 I'm going to go ahead and wrap up these
15 last two sections. It will take 10, may be
16 20 minutes, then we will hear from you which is why
17 we're really here.

18 This informational session is provided
19 for the benefit for those who maybe unfamiliar with
20 the facility. I see a lot of people around here
21 who have a real intimate knowledge of the INEEL,
22 and the Chem Plant in particular. And for you
23 folks, please don't be insulted if I talk about
24 things in layman's terms, but I'm going to try to
25 make this as simple as I can to understand for

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1 those who aren't familiar with the facility.

2 The key to understanding how the
3 contamination moves at the Chem Plant or the INTEC
4 facility is understanding how the water moves.
5 The aquifer and the perched water bodies are
6 interrelated, in that the water that comes into the
7 surface, either from man-made sources, are pumped
8 out of the aquifer and are recharging elsewhere, or
9 a natural precipitation affect these perched water
10 bodies, which, in turn, mobilizes the contamination
11 or dissolves contamination and can carry it to the
12 aquifer.

13 We have three perched water bodies at
14 the Chem Plant. The first major perched water
15 is 110 feet below the ground surface. The second
16 one is at 140 feet, then we have another
17 significant perched water body at 380 to 420 feet
18 below the ground surface. And then the regional
19 aquifer, the Snake River Plain Aquifer is present
20 at about 460 feet below the ground surface. That
21 aquifer is about 250 feet thick.

22 What is perched water? Perched water is
23 water that is migrating down from the surface
24 through the porous media that is present, the upper
25 portion. The upper 40 to 50 feet at the Chem Plant

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1 is primarily sand and gravel. And it's underlying
2 the next 60 feet to 110 feet below the ground
3 surface, mainly fractured basalt. There it
4 encounters a less permeable layer. It's clay and
5 sand. You can think of water when it gets there
6 not moving as fast and somewhat ponding within the
7 floor spaces that are present in the fractured
8 media.

9 In the perched water what we know about
10 it -- actually, I was asked to point out that last
11 figure I showed you with the injection well, we'll
12 get to this in a minute.

13 For the contaminants in the perched
14 water, we know that we have technecium-99. We have
15 nitrates. We have strontium-90. We have
16 neptunium-237, and we have tritium. The primary
17 contaminant in the perched water is our
18 strontium-90. We have seen concentrations of the
19 strontium-90 as high as 500,000 picocuries per
20 liter in the perched water bodies. And by
21 comparison, the drinking water standard for
22 strontium-90 is only 8 picocuries per liter. We
23 also feel that we have at least one well that
24 indicates that we have a continuing flux of perched
25 water carrying surface contaminants to the aquifer

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1 today.

2 Now, the sources that reach the aquifer,
3 the primary source is the plants' percolation
4 pond. They are south of the facility, and they
5 contribute on the order of 690 million gallons a
6 year of recharge to these perched water zones. The
7 second largest source of recharge or of water
8 available to these perched water bodies is the Big
9 Lost River. And that source is variable. It
10 varies from between 100 to 200 million gallons a
11 year, but we really don't know for sure because
12 some years the river doesn't run at all. Some
13 years it runs
14 year-round. We are going to try to further
15 quantify that in conjunction with the Tank Farm
16 investigation. On average, that river runs about
17 one year out of three.

18 The next largest contributor is natural
19 precipitation, rain and snowmelt. In the northern
20 area of the Chem Plant, which is our area of
21 greatest concern, the area beneath the Tank Farm,
22 we believe there is on the order of 4 million
23 gallons of recharge from natural precipitation.

24 With the sewage treatment plant, that is
25 their sanitary waste water disposal infiltration

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1 lagoons, between 25 and 30 million gallons a year.
 2 We have another 12 million gallons a year from
 3 leaking fire water lines, another 2 million gallons
 4 a year from lawn irrigation activities. And then
 5 we've got a steam condensate disposal system that
 6 essentially goes into dry wells. They are very
 7 shallow, no more than 10 feet and filled with
 8 gravel that disposes of the steam condensate from
 9 the heating system from the facility. And that is
 10 on the order of 4 million gallons per year.

11 What we don't know is, how much of this
 12 water do we need to eliminate from the system to
 13 prevent contaminants from migrating to the aquifer
 14 at unacceptable concentrations? For the perched
 15 water, we didn't really do a risk assessment
 16 because we didn't believe that that water would be
 17 available once man-made sources or recharge are
 18 gone. That is, the plant is no longer in service,
 19 things were brought to grade, and it's the only
 20 natural precip in the river that recharges it.

21 So we didn't really do a risk assessment
 22 for the groundwater pathway, but we know that there
 23 is a good deal of contamination present in this
 24 zone that will impact the aquifer. Our objective
 25 is to reduce the leaching, the strontium-90 to the

1 and treat that, was a \$260 million alternative.
 2 Alternative 2, which is to let it drain out, to dry
 3 it up and to turn off these sources is only a
 4 \$30 million option.

5 For the value added, we do not feel that
 6 the pump and treat had much to offer us. The
 7 reasons for that are, this interbed -- these
 8 interbed areas are not this nice sloped drain that
 9 will lead to a well where we can extract all that
 10 water and recover it all and treat it. In
 11 contrast, if you have ever been to Hell's Half Acre
 12 and you've seen the lava flows emulating, we
 13 probably have an uneven surface there. No matter
 14 where we put the wells, we are not going to recover
 15 100 percent of this water to begin with.

16 Further, there is an absorption
 17 coefficient that is associated with our primary
 18 contaminant of concern, that is the strontium-90
 19 that we think is between 12 and 24. That means
 20 that one of 1/24th of the contamination is present
 21 in the water portion. The other 23/24ths or
 22 11/12ths, whatever the case may be, is present in
 23 these soils. So if we don't get to pull all the
 24 water out, we still have only recovered a minor
 25 percentage of the total amount of contamination

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1 aquifer within a time frame that will allow that
 2 aquifer to be usable again within 100 years and to
 3 minimize these man-made resources of recharge to
 4 the aquifer.

5 We looked at three alternatives. The
 6 first one is our requisite No Action alternative.
 7 The second one is we looked at additional
 8 institutional controls to the existing controls
 9 that are present at the facility and to take a
 10 phased approach to, if you will, turn off some of
 11 these water sources. For instance, moving these
 12 perc ponds to an area that will no longer recharge
 13 this contaminated zone.

14 Then Alternative 3 is the same as
 15 Alternative 2, only it would additionally seek
 16 actively to remove this perched water from the
 17 subsurface and treat it and dispose of it.

18 Now, Alternative 1 doesn't protect the
 19 aquifer, which already, in the area beneath the
 20 Chem Plant, exceeds drinking water standards. We
 21 have an ongoing flux of contamination through this
 22 aquifer.

23 Alternative 2 would, over time,
 24 eliminate this flux of contamination to the
 25 aquifer. Alternative 3, which would further pump

1 there. We felt that the better alternative was to
 2 remove the sources of recharge and to allow the
 3 existing perched water to drain out.

4 Now, on to the aquifer. The primary
 5 source of contamination in the aquifer is the
 6 infamous ICPP injection well. From 1952 until 1984
 7 one and a half to two million gallons of surface
 8 waste water per day were discharged to this well,
 9 which went directly to the aquifer. Over the
 10 30 years or so that the well was in operation, some
 11 11 and a half billion gallons of waste water was
 12 disposed of through the well.

13 The well was taken out of routine
 14 service in 1984 and was permanently pressure
 15 grouted shut from the bottom, which the bottom of
 16 the well is 598 feet deep, but to the surface at
 17 300- -- well, it was perforated with detonation
 18 cord and pressure grouted at 300 PSI to the
 19 surface, so that well is not going to be used any
 20 longer. But it is the primary source of our
 21 contamination. So 23,000 curies of tritium was
 22 injected through that well over 30 years of
 23 operation.

24 As I mentioned before, we also have
 25 somewhat of a contribution ongoing for perched

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1 water entering the top of the aquifer. We have
2 four contaminants that are present in the aquifer
3 today that are associated with the injection well.
4 They are mercury, which we think is confined to the
5 immediate area of the former injection well. We
6 have radionuclides: strontium-90, tritium, and
7 iodine-129.

8 This is the strontium-90 plume. On
9 the outside of this contour here corresponds to
10 this 8 picocurie per liter, strontium-90 maximum
11 contaminant level.

12 AUDIENCE MEMBER: Which line?

13 MR. RENO: This outside line. That is
14 the 8 picocurie line. For reference, if you're
15 familiar with the facility, this is the Central
16 Facility Area, which is about three miles south of
17 the Chem Plant. This is Lincoln Boulevard that
18 runs north and south throughout the INEEL. This is
19 Portland Avenue, which goes from CFA over to the
20 RWMC area in there.

21 How about that one. This is our tritium
22 plume. Again, this is the Central Facilities
23 Area. On the outside of this line corresponds to
24 our MCL contour line for tritium, which is 20,000
25 picocuries per liter. Now, the strontium-90 and

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1 the tritium both are fairly mobile contaminants.
2 That is, they move fairly readily in water, and
3 they have relatively short half lives.

4 The tritium has a 12.3 year half life.
5 The strontium-90 has a 29.1 year half life. What
6 this means is, since the injection well has been
7 taken out of routine service, these areas
8 corresponding to the strontium-90 and the tritium
9 MCL contour lines have been receding. They are
10 moving back closer to the plant. We do think that
11 due to this, current flux to the aquifer from the
12 surface contaminants that the trend is not as
13 pronounced as it was for the first few years
14 because of us reaching somewhat of a quasi-steady
15 state or equilibrium in the aquifer.

16 What we're not seeing, a real receding
17 of the plume, is our iodine-129 plume. The reason
18 is because iodine-129 has a 15 million year half
19 life. Even though it readily moves with the water
20 and dilutes and disperses, we're not seeing any
21 radioactive decay associated with the iodine-129.

22 This line right here is associated with
23 the area that currently exceeds the 1 picocurie per
24 liter drinking water MCL for iodine-129. The
25 highest measured concentration we have for recent

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1 data in the aquifer is from this well, between
2 three and four picocuries per liter. But that is
3 over an open interval well, and we feel there may
4 have been some depth within that well that were of
5 higher concentrations that were diluting with,
6 maybe, somewhat cleaner water from other depths
7 within the aquifer. That is a key point when we
8 look at what our preferred alternative is for the
9 aquifer. I will get to that in a moment.

10 What we know is we have a sole source
11 of drinking water to the region. Strontium-90,
12 iodine-129, mercury, and tritium are the
13 contaminants of concern and that our fate, and
14 transport modeling are computer estimations of what
15 will happen in the future will indicate that with
16 no action, we're not going to be below those MCLs
17 100 hundreds from now. We may not be too far over
18 them, but we're probably not going to be under
19 them. And we know that we have an ongoing flux of
20 contamination from the perched water.

21 What we don't know, is we don't know
22 really how close we're going to be in our
23 predictions and what will happen in the future
24 for our groundwater model. So one of our
25 alternatives is going to look to verify some of

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1 those modeling assumptions.

2 We believe that a remedial action is
3 warranted because we certainly have an MCL
4 exceedance in the aquifer that we think is going to
5 continue up until 100 years from present and we
6 would like to see the aquifer restored for
7 beneficial uses in the vicinity in the Chem Plant.

8 The first alternative is our
9 requisite, No Action alternative. Alternative 2A
10 is institutional controls, long-term monitoring,
11 and source control. That source control borrows
12 upon some of these perched water remedies. That is
13 that these sites are interrelated.

14 The modeling indicates that if we do
15 remove the percolation ponds as a source of
16 recharge to the perched water and eliminate pumpage
17 from the facilities' production wells that the
18 aquifer will, due to the delusion, disperse, and
19 decay, be suitable for use under our current
20 drinking water standards again 100 years from now.

21 So Alternative 2B, we seek to go out and
22 verify these modeling assumptions. What is being
23 proposed is five new monitoring wells that we would
24 sample at discrete intervals along the depth from
25 the top of the aquifer to the bottom to ensure that

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1 none of these intervals exceed an action level.
 2 And action level, we establish it by asking our
 3 computer model what concentrations is the maximum
 4 we can see in the aquifer today of iodine-129 that
 5 we can be sure that if we're below that, we will
 6 still be below our drinking water MCLs in 100
 7 years. The answer was 11 picocuries per liter. So
 8 that is what we're looking for in these five
 9 wells. If we exceed that, then we would pose a
 10 contingent active remediation of that zone that
 11 exceeds the 15 picocuries per liter, which we think
 12 most likely will occur in the low permeability zone
 13 that occurs. It's an interbed we have in the
 14 middle of the aquifer, kind of sandwiched in.
 15 The last alternative, Alternative 3, is
 16 very similar to what I've just described for
 17 Alternative 2B, only it's a contingent -- more
 18 aggressive approach to groundwater pump and treat.
 19 Instead of targeting a zone within the aquifer,
 20 we would just pump over the entire depth of the
 21 aquifer. Our preferred alternative is
 22 Alternative 2B, which is institutional controls
 23 with monitoring and contingent hot spot removal if
 24 the action level is exceeded.
 25 Which brings us to your last slide. We

1 levels of 11 picocuries per liter.
 2 MR. RENO: No, the highest that we've
 3 seen, the highest concentrations observed in the
 4 aquifer are between 3 and 4 picocuries per liter,
 5 but it's over open interval wells. And these wells
 6 have vertical gradients. There is mixing from the
 7 different zones that are within there. The concern
 8 is that if somebody wants to put a well in in the
 9 future to use for drinking water purposes, that
 10 there is not good control whether they could screen
 11 that well for what zone they might be extracting
 12 their water from.
 13 AUDIENCE MEMBER: Is the mercury just a
 14 side issue? You didn't address that at all in the
 15 aquifer business.
 16 MR. RENO: That's a good point. The
 17 mercury is not a side issue. We feel that the
 18 mercury is confined to the area immediately
 19 surrounding the old injection well. We've never
 20 really seen it in any of our monitoring wells, so I
 21 think it's pretty much absorbed.
 22 AUDIENCE MEMBER: I have one other
 23 question. The perched water alternative to stop
 24 the sources, that sounds like it would be a heavy
 25 influence on the aquifer itself. Why don't we go

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1 want to know what you think. If you have any
 2 questions that we can clarify what we're proposing
 3 to do, we'll entertain those questions and try to
 4 answer them the best we can. We encourage you to
 5 comment and ask questions for things that you don't
 6 understand. We expect to have a Record of
 7 Decision issue next summer that will include our
 8 Responsiveness Summary, all the comments that are
 9 presented to us this week and before the comment
 10 period ends. And we expect to get to work out
 11 there immediately after the signing of the ROD this
 12 summer.
 13 AUDIENCE MEMBER: I have just one
 14 question. You mentioned millions of gallons of
 15 water that was put into the aquifer, but you didn't
 16 mention how much water was in there, so I don't
 17 know how much lemon juice you put in the lemonade.
 18 MR. RENO: I've been told that the
 19 Eastern Snake River Plain contains as much water as
 20 Lake Erie. So, you know, there is dilution that
 21 occurs there. We know what the concentrations
 22 and the contaminants are in the vicinity of the
 23 Chem Plant.
 24 AUDIENCE MEMBER: On the map of the
 25 iodine, it doesn't look like you found the action

1 ahead with that alternative regardless of whether
 2 we do anything long term with the aquifer?
 3 MR. RENO: I think that's a good idea.
 4 AUDIENCE MEMBER: That is something that
 5 could be addressed now. Do we continue to add to
 6 this perched water stuff out there?
 7 MR. RENO: Well, presently, until the
 8 decision is reached but, you know, so the study
 9 portion is over for the perched water portion of it
 10 other than we are going to take a phased look.
 11 We're not sure exactly which sources to remove to
 12 stop the flux to the aquifer, so we will start
 13 turning them off one by one.
 14 AUDIENCE MEMBER: Because you said if
 15 that were effectively done, in 100 years that might
 16 well solve the aquifer problem if I understood you
 17 correctly.
 18 MR. RENO: You heard me correctly.
 19 AUDIENCE MEMBER: What are the
 20 percolation ponds used for?
 21 MR. RENO: The question was what the
 22 percolation ponds are used for. And they are used
 23 to dispose of plant service waste water. This is
 24 cooling waters and processed water that is used
 25 throughout the plant. The ponds currently have a

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1 permit from the state of Idaho to discharge the
2 service waste. That permit is up for renewal in
3 the fall of the year 2000. They are disposing of
4 the same kind of liquid that went down in the
5 injection well.

6 MR. RAUNING: Scott, in reference to
7 this question on shutting off the water, you might
8 mention that we're going through some steps to get
9 the perc ponds shut down.

10 MR. RENO: Dennis is right. The
11 Lockheed people and Department of Energy are
12 currently evaluating alternative methods for
13 disposing the plant waste water. This decision
14 hasn't been made yet. They do have to do something
15 to meet the new Idaho Groundwater Water Quality
16 Rule, which was promulgated in April of last year,
17 and will affect the effluent concentration limits
18 that will be allowed when the permit is reissued,
19 if reissued. Anyway, in an ongoing effort to
20 evaluate an alternative way to dispose of the plant
21 waste water as we speak.

22 MR. SIMPSON: We can kind of deferred a
23 question that came up earlier during Talley's
24 portion of the presentation, and that is how these
25 soil types contribute to plutonium mobility --

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1 sorry, that was during Wayne's.

2 AUDIENCE MEMBER: The soil types that
3 we're talking about, especially in the Tank Farm,
4 we have highly acidic waste exposed to the tank and
5 so the soils that are contaminated in the Tank
6 Farm, especially the ones near the leaks, are also
7 still highly acidic. I think we have a pH2 in some
8 of our soil samples. Low pH soils or low pH
9 liquids tend to mobilize heavy metals. Plutonium
10 is a heavy metal, so that low pH, as long as that
11 stuff is in that state, is going to be fairly
12 mobile. As stuff moves down through our soil, it
13 will tend to be get buffered and neutralized
14 because we have so much calcium carbonate. Our
15 natural pH out there is about 8. So we think as
16 the sediment moves downward through the soil
17 column, it will gradually become less mobile. But
18 in the form it was released, it was released as a
19 processing liquid, and it was dissolved in acid. So
20 it was released in a fairly mobile form, but the
21 high pH soil that we have will tend to reduce that
22 mobility very rapidly.

23 AUDIENCE MEMBER: I had a question that
24 may be well on the same lines, and it was from
25 Talley's presentation. In the list under other

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1 surface soils, "What We Don't Know," there is a
2 bullet, "Depth of excavation below 10 feet will be
3 determined based on the leachability of
4 the contaminant." Did I hear you correctly refer
5 to the 10 feet as the basement level?

6 MR. JENKINS: Under our land-use
7 scenario, what we've decided is that -- what we
8 call a basement or the future residential use, it
9 was assumed that a homeowner would go out and dig a
10 10-foot basement. That's what we use for a depth
11 excavation, at least for an evaluation.

12 We do know for a couple places there are
13 significant contamination at depths greater than
14 this 10 feet. One of the issues that we'll still
15 have to deal with is, is that concentration high
16 enough and leachable enough that it would still
17 impact the aquifer if we were to remove the top
18 10 feet.

19 AUDIENCE MEMBER: So the first 10 feet,
20 though, is to protect the future resident?

21 MR. JENKINS: Yes.

22 MR. SIMPSON: I would like to take about
23 a 10-minute break right now. If you can think of
24 some questions during the break, we will come back
25 and address those at that time, and then we will

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1 have the formal comment session.

2 Are there any other questions at this
3 time?

4 (Recess.)

5 MR. SIMPSON: Are there any other
6 questions?

7 AUDIENCE MEMBER: Are these not
8 clarifying?

9 MR. SIMPSON: These are as detailed as
10 you would like them to be.

11 MR. PIERRE: Bob, if you want to come
12 up.

13 AUDIENCE MEMBER: The one that I have my
14 display open to is other surface soils, the
15 material, the contaminated soil that will go into
16 the engineered disposal facility, I understand that
17 you haven't established waste acceptance criteria
18 for it, but could you do some sort of thumb-nail
19 comparison between soils that will go into that
20 facility from the Chem Plant, compare that with
21 material that BNFL will be treating at RWMC, and
22 the material that might go back into Pit 9 after
23 treatment and the material that is being left in
24 place at the Naval Reactors Facility?

25 MR. PIERRE: Keith Rose is in the

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1 audience and is the EPA WAG manager for the
2 Naval Reactors Facility. I will take a shot at the
3 RWMC.

4 The material that BNFL will be handling
5 is transuranic waste.

6 AUDIENCE MEMBER: Not nearly all of it,
7 it's alpha.

8 MR. PIERRE: The Subsurface Disposal
9 Area, we're looking at that material as -- the
10 decision that they're making is whether or not the
11 material exceeds 100 nanocuries per gram, those
12 wastes that exceed 100 nanocuries per gram of TRU,
13 transuranic, that material will be packaged and
14 sent to waste sites like the Pilot Plant. The
15 material that is less than that, as far as where
16 that is going to be managed, that decision, as far
17 as I know, has not been made -- I'm getting to
18 Pit 9 --

19 AUDIENCE MEMBER: No, Wayne, I think
20 that you're incorrect about BNFL. I think a
21 good deal of the treatment at BNFL is driven to
22 transform alpha waste into TRU waste. It is
23 already -- it may be even lower than 6, but
24 potential 100, 10 to 100. They are not starting
25 with TRU waste. So let me rephrase the question.

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1 What would alpha 10 to 100 go in this facility?

2 MR. PIERRE: No, would be the simple
3 answer. And for Pit 9, alpha greater than
4 10 nanocuries per gram would also not go into
5 Pit 9 when Pit 9 is completed. Again, the same as
6 with Pit 9 and with the transuranic storage area,
7 you're right. A lot of the waste is alpha waste,
8 but the goal is to take the waste and wind up with
9 two waste streams. One waste stream is above
10 100 nanocuries per gram to another waste stream
11 that is below 10 nanocuries per gram. That is also
12 the goal of Pit 9.

13 AUDIENCE MEMBER: For the Naval Reactors
14 Facility --

15 MR. ROSE: I'm Keith Rose. I'm EPA's
16 project manager for the Naval Reactors Facility. I
17 don't recall the highest concentrations of
18 contaminants there, but the primary radionuclides
19 of concern are cesium and strontium, and I believe
20 the majority of the soil contamination there
21 presents a risk for the 100-year future residential
22 scenario, like 3 or 4 above our clean-up goal. So
23 it's not -- at least not in the order of the
24 magnitude above that, but like 3 or 4. I know
25 there are some spots that are a little higher than

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1 that because they are at the end of the discharge
2 pipes or whatnot, but I don't recall the exact
3 numbers.

4 AUDIENCE MEMBER: So it is pretty much
5 the same kind of soil that would go into the
6 Chem Plant?

7 MR. ROSE: Yes. That soil is very
8 similar to what would be taken up from the Group 3
9 soil group at the Chem Plant and put into the
10 repository, yes, that would be similar.

11 MR. PIERRE: Does that answer your
12 question, Beatrice?

13 AUDIENCE MEMBER: Not the underlying
14 questions, but go ahead.

15 AUDIENCE MEMBER: I don't understand
16 alpha and transuranic. I've been out of it for a
17 couple years. Define that, please.

18 MR. NITSCHKE: Well, it's kind of an
19 INEEL distinction that has been made and there has
20 been some regulatory differences through time, but
21 statutorily, typically, what you're familiar with
22 is, transuranic waste is that waste having more
23 than 100 nanocuries per gram and nuclides greater
24 than 20 years or something.

25 At the INEEL, for the purposes of

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1 management disposal at the SDA, we set a limit of
2 10 nanocuries per gram. So we created this orphan
3 waste, essentially, between 10 and 100 nanocuries
4 per gram that we typically now call alpha
5 contaminated low-level waste. That is the
6 distinction between 10, 100, transuranic, and alpha
7 contaminated waste and below that is low-level
8 waste.

9 AUDIENCE MEMBER: That particular waste
10 can be handled in nontransuranic facilities, is
11 what you're telling me?

12 MR. NITSCHKE: Not on the INEEL.

13 AUDIENCE MEMBER: Between 10 and 100, I
14 mean. You're just saying that's just low plutonium
15 or low transuranic waste, and it's nontransuranic
16 waste.

17 MR. NITSCHKE: It's still alpha
18 contaminated. It depends on what you're doing with
19 it and in its waste form you may take whatever
20 steps.

21 AUDIENCE MEMBER: Does anybody else in
22 the world do this, categorize this? I don't know
23 now. I've been out of it a couple years.

24 MR. NITSCHKE: Of course, the limit
25 through the years has changed somewhat.

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1 AUDIENCE MEMBER: It's gone up, though.
 2 MR. NITSCHKE: But we kept it down for
 3 the purposes of disposal at the RWMC.
 4 AUDIENCE MEMBER: It's the B-10.
 5 MR. NITSCHKE: Yeah, it is. But we kept
 6 it for other reasons, an intruder scenario and so
 7 forth for disposal criteria.
 8 AUDIENCE MEMBER: They kept it that way
 9 because it's all mixed together.
 10 AUDIENCE MEMBER: So a little bit
 11 doesn't hurt you.
 12 AUDIENCE MEMBER: I have a question. We
 13 have been talking about the dangers of this waste
 14 and the problems caused by it, but in the past
 15 50 or 60 years, have there been any known deaths
 16 that can be traced directly to the buried waste or
 17 the stored waste or the transportation of any of
 18 this waste? Are there any known deaths or injuries
 19 because of these dangerous things that we're
 20 talking about, and if not, how dangerous are they?
 21 MR. NITSCHKE: I think I like my seat in
 22 the back much better. I'm really not prepared to
 23 answer that completely. I can give you my own
 24 thoughts, most of the types of things that you're
 25 talking about, a death would be through an accident

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1 or so forth, the kind of effects that you get from
 2 contamination, typically, are like cancer, which
 3 would take place over time.
 4 As you are well aware, cancer is such a
 5 pervasive result of aging, whether or not that
 6 particular exposure or any one of a number
 7 throughout your whole life in other situations is
 8 maybe hard to distinguish, so I can't answer that
 9 directly, but there aren't people keeling over, if
 10 that was your question.
 11 AUDIENCE MEMBER: It was not quite my
 12 question. How many of these people are keeling
 13 over from cancer? For instance -- I understand
 14 that about one out of four of us are going to get
 15 cancer eventually, and you're talking about 1 in
 16 10,000. How dangerous is the situation that's
 17 causing one additional cancer in 10,000 compared
 18 with going fishing?
 19 MR. NITSCHKE: The fishing risk and the
 20 carcinogenic risk are really to disparate to try to
 21 make a comparison. What we're really saying is an
 22 individual's incremental cancer risk is 1 in
 23 10,000. You can argue how significant that is, but
 24 that is the statutory limit that we're targeting
 25 for, and that's our job.

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1 MR. PIERRE: And that is the upper risk
 2 range of that limit.
 3 AUDIENCE MEMBER: I told Tom Wichmann --
 4 but he walked out -- that I had some EIS questions,
 5 but but he walked out anyway.
 6 It's my understanding that one of the
 7 alternatives being considered for high-level waste
 8 tanks is either leaving them in place or, you know,
 9 putting contamination in them, grouting them and
 10 leaving them in place. Does leaving those tanks in
 11 place make your job of getting contaminated soil
 12 removed harder?
 13 MR. PIERRE: If the contaminants, the
 14 mobility of the contaminants in the Tank Farm soils
 15 are such that a containment scenario, a capping
 16 scenario, would not effectively protect the
 17 aquifer, yes, it would. Then we would have to
 18 evaluate the needs of one program versus the needs
 19 of another. In other words, the objective of all
 20 the programs are to protect the receptors, protect
 21 the Snake River Plain Aquifer, to be protective in
 22 the world that we measure risk in. So if the
 23 decision was to cap in place and if the risk was
 24 unacceptable, then the decision to cap in place
 25 would have to be reviewed.

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1 MR. JENKINS: Let me see if I can
 2 clarify a little bit. I think the other part of
 3 your question was, for instance, if they filled the
 4 vaults full of concrete would that make digging the
 5 soil up harder? The answer is no. Whether the
 6 structure is there or not, it really wouldn't
 7 impact that, but the risk to the groundwater would
 8 be impacted by whatever we leave behind, either the
 9 soil or what is in the tank.
 10 MR. PIERRE: What Talley is getting at,
 11 the tanks sit on the bedrock, but it also gets into
 12 what type of technologies we would need to look at
 13 it as we do the investigation. Probably the
 14 easiest way to answer that is, as we are doing
 15 additional work, we will be back, or at least
 16 some of us, by the year 2003, to discuss that
 17 coordination. And at this time we don't really
 18 know what the final solution is on the Tank Farm,
 19 what is going to be left in place, what is going to
 20 be removed. And we're collecting additional
 21 information, as far as what the soils in the Tank
 22 Farm represents, as far as the risk to the
 23 groundwater and whether plutonium is one
 24 contaminant that needs to be addressed, special
 25 from the strontium-90 concerns.

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1 MR. JENKINS: Did we answer that,
2 Beatrice?

3 AUDIENCE MEMBER: Yes, I guess, because
4 my next question was, in the Tank Farm presentation
5 it said, "However, even if the site is eventually
6 capped as a landfill." And I wanted to know what
7 is the possibility of that eventuality taking
8 place, and, perhaps, compare that eventuality to
9 removing 10 feet of contaminated soil, less
10 contaminated soil than other areas.

11 MR. PIERRE: I really have no idea
12 of the eventually of capping in place. What I
13 identified in my presentation was to take a look at
14 what I would consider to be, let's say -- I don't
15 want to use the worst case, but let's say an
16 extreme case of trying to cap in place, that even
17 under that scenario, because the interim action
18 cannot be inconsistent with the final action. Even
19 under that scenario, we would still want to prevent
20 run on. So the solution that we're proposing as
21 the preferred alternative for the Tank Farm
22 soils from our understanding would apply to the
23 potentials that may occur in the decision on the
24 Tank Farm, but as far as the potential, that is
25 something that I would defer you to Kathleen Trevor

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1 to discuss that.

2 AUDIENCE MEMBER: It would seem to me
3 that Group 3 is an area, how large?

4 MR. JENKINS: Group 3 is basically the
5 20 sites and together they added up to be, oh, 40
6 or so acres.

7 AUDIENCE MEMBER: I guess my point is,
8 it would seem to me the other surface soils portion
9 of this project is probably the least confident in
10 the whole batch, based on it was developed as a
11 result of inadvertent spills, spills may or may not
12 have been documented, and I would say you indicated
13 54 or some number of instances.

14 Knowing the early days, how do you
15 determine that they aren't within these multiple
16 acres additional surface soils where some guy in
17 1958 took a value and dumped it in the ground and
18 it no longer is emitting radiation that is well
19 enough for you guys to determine?

20 So that's a real bad one there. At
21 least around the Tank Farm and the other facilities
22 and bottles of gas, et cetera, you know,
23 generally, where they are. Unless you have more
24 sophistication now than what I'm aware of, those
25 things could be in that ground, locations well and

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1 above 20 source areas.

2 MR. JENKINS: I guess I'll answer
3 that in two parts. The first being for the
4 investigation that we're talking about, we have
5 actually gone out and interviewed former workers
6 there, searched the records. That is how we came
7 up with the 95 sites.

8 AUDIENCE MEMBER: Ninety-five.

9 MR. JENKINS: Ninety-five is what we
10 started with. However, we have and probably will
11 continue to identify additional sites all the way
12 through closure of the entire facility. So we
13 based our evaluation on the sites that we know at
14 this point, and we have a process to capture those
15 that we identify in the future.

16 AUDIENCE MEMBER: But you would expect
17 that there may well be additional?

18 MR. JENKINS: We may well come across
19 more in the future. That was my only point because
20 documentation and procedures and operational
21 conditions in those days weren't, I'll tell you,
22 nearly so disciplined as we think they are now.

23 MR. PIERRE: One of the sad truths of
24 the Federal Facility Agreement and Consent Order,
25 when we created it back in 1990 and signed it

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1 in '91 was this kind of static relief that we will
2 be able to go through the process once and reach
3 decisions. At that time, we had the thought of
4 2001. You can see it's not 2001 anymore; it's
5 2004.

6 But the reality is, as the years go by,
7 new sites keep getting identified. The fact that
8 a lot of the closures are leaving waste behind,
9 leaving restricted and limited use. And I quite
10 honestly today see no end in sight for the Federal
11 Facility Agreement and Consent Order. It's going
12 on forever.

13 AUDIENCE MEMBER: It's more of a comment
14 than anything else.

15 AUDIENCE MEMBER: My question is, as far
16 as the contaminated soil, is it not so that you
17 have to concentrate some of the contaminants in
18 order to have them acceptable by the WIPP? Is that
19 so? If that is so, are you not making the sample
20 more dangerous than it was before? So why don't
21 you go in the opposite direction and simply spread
22 this stuff out?

23 MR. PIERRE: I'll take the first part of
24 your comment. First of all, your comment is
25 really related to Pit 9 and the Radioactive Waste

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1 Management Complex, and that's not what we're here
2 talking about today, but the Chem Plant.

3 But the fact is that DOE has a decision
4 that they cannot bury orphan waste, as I
5 mentioned before, or Pit 9 excavation or any other
6 excavation in the Radioactive Waste Management
7 Complex. We do have to treat materials so that it
8 falls into one of two or alternatives. One is
9 below 10 nanocuries per gram. The other one is
10 above 100.

11 When I mention 100, the 100 for the last
12 time I saw the draft permit on the Waste Isolation
13 Pilot Plant, you are required to have a 95 percent
14 confidence. So when we use the word 100, it's
15 really by measurement depending on which company
16 you're looking at. Banerra, I believe, it's
17 60 nanocuries per gram to achieve the appropriate
18 confidence level for the 100. Therefore the number
19 then is 10 to 60. But the point is, yes, you do
20 need to do technologies for contaminated soil that
21 is above 10 nanocuries. As you excavate from the
22 ground, you do need to do something whether that is
23 a soil sorter, whether it's some sort of
24 vitrification or some combination of mingling that
25 or mixing that with soils of waste well above 100

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1 nanocuries per gram in order to achieve material
2 that WIPP will accept. If it's between 10 and 100,
3 it cannot be managed on INEEL, and I don't know any
4 place that we can send it.

5 MR. SIMPSON: Are there any other
6 questions?

7 AUDIENCE MEMBER: I suppose you could do
8 like some of us have done. You could add stainless
9 steel and increase the contamination in terms of
10 heavy metal and make it transuranic. I mean,
11 that's been going on for years.

12 MR. PIERRE: That is not part of the
13 Pit 9 process. A comment in that same direction if
14 you may, it seems that the three of us are doing
15 all of the questioning here, but a comment in the
16 same direction is why not vitrify this material and
17 then grind the stuff into sand and then scatter
18 it?

19 MR. PIERRE: If you'll notice, I didn't
20 answer the second part of your question. That's
21 the same question.

22 AUDIENCE MEMBER: You're not going to
23 answer this one either. Okay.

24 MR. PIERRE: As a member of the
25 Environment Protection Agency for 25 years,

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1 delusion is not a solution.

2 MR. SIMPSON: You heard it here, folks.

3 Other questions?

4

5

6 FORMAL COMMENT PERIOD

7

8 MR. SIMPSON: Any other questions?

9 Okay. At this time I'd like to encourage people to
10 comment for the record. And we have a court
11 reporter here tonight who will be recording your
12 comments verbatim.

13 Please, when you make a verbal comment,
14 state your name and spell it and give a mailing
15 address so we can mail you the Record of Decision,
16 and your comment will be responded to in the
17 responsiveness summary section of the Record of
18 Decision.

19 If you would like to make oral comments,
20 state your name.

21 AUDIENCE MEMBER: The ones we've already
22 made?

23 MR. SIMPSON: Mr. Jobe, I think you have
24 to --

25 MR. JOBE: I'm Lowell Jobe. I will give

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1 you a copy of this, the comments from Coalition 21
2 regarding the proposed cleanup. The proposed plan
3 for the clean up for the contaminated soils in the
4 groundwater appears to be well done under the
5 overall conservative assumptions in the regulations
6 by which they have to abide.

7 Our major concern is with the estimate
8 and the calculations, in that overly conservative
9 values have been used due to using a linear- and
10 no-threshold approach, which has been shown to be
11 incorrect.

12 Recent scientific values of at least
13 5 rem -- and there are actually two more recent
14 values of 10 and 20 rem that have been reported
15 instead of the 15 MR would lead to much lower
16 cost figures for accomplishing a cleanup.
17 Therefore, we feel that either these higher figures
18 should be used, or at least as an alternative cost
19 estimate. We expect to comment further before the
20 deadline of December 22 after further study of
21 these documents. That's the main point there.

22 MR. SIMPSON: Thanks. Anyone else?

23 AUDIENCE MEMBER: I would like to make a
24 comment on what Mr. Jobe just said and that was
25 that 15 MR. That 15 MR is 15-thousandths of 1

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1 rem. And you noted that he went up to 10 and even
2 20 rem. So that 15 MR is less than 1-thousandth of
3 the amount of radiation that some people consider
4 as satisfactory.

5 My name is George Wood. My address is
6 1680 North Main Creek Road, Pocatello, Idaho
7 83204. My telephone number is 233-3421.

8 MR. SIMPSON: Anyone else? Beatrice,
9 would you?

10 AUDIENCE MEMBER: My name is Beatrice
11 Brailsford. I'm the program director for the Snake
12 River Alliance. We will have written comments at a
13 later date.

14 These are concerns that I have already
15 shared with the agencies, not just this evening but
16 before this meeting began, that there seems to be a
17 lack of -- it's not a lack, but we are making
18 decisions, if not in a piecemeal fashion, then at
19 least, certainly, ones that may not total up to a
20 site that we want or at least that might not total
21 up to a site that we already know about.

22 I think the question that we have
23 repeatedly asked is, "Where will we be when we get
24 there? What is this site going to be like when
25 we're cleaning up?" If it's leaving soil in place

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1 that you folks are proposing to put in an
2 engineered landfill, and how do those two decisions
3 relate?

4 It now -- this evening we're told that
5 the assumption is that we're going to entomb in
6 place more than just sealed waste in calciner. Are
7 all these entombing in places covered in the mother
8 EIS, in the site-wide EIS? And the answer is no.
9 I can tell by the nod of your head that the answer
10 is no.

11 And down the road we are going to have a
12 lot of bits and pieces, and we're going to try to
13 work it in the WAG 10, but in WAG 10 we will have
14 made a lot of our commitments. Here you folks are
15 planning to remove the contamination from your tank
16 system, and the folks who are in charge of the
17 high-level waste tanks are thinking maybe they
18 won't take their tanks out of the ground.

19 I don't see an overall controlling
20 philosophy for what is going on at the different
21 WAGs. I understand that we're at this historical
22 point, that it may fall into place and it may not.
23 But I guess I do want to read just two sentences
24 from our colleagues at the Institute for
25 Environment and Energy Research.

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1 "Institutional memory is short and if
2 the past is any guide, people in the future may use
3 contaminated resources for some time and make
4 investments before they discover the
5 contamination. They will then be faced with
6 wrenching decisions of whether to abandon their
7 investments or live with what would normally be
8 unacceptable risk or pursue remediation that, in
9 many cases, may be far more costly than the
10 original remediation and waste management
11 solutions." I want you to focus on the word
12 "wrenching."

13 AUDIENCE MEMBER: I want to add to my
14 earlier comment, if I may interrupt. The soil at
15 NRF, which I referred to earlier, is not being
16 left in place without treatment. That has been
17 consolidated and capped.

18 AUDIENCE MEMBER: But it's not going in
19 an engineered landfill.

20 MR. ROSE: That's correct.
21 It's going into an existing leach pit that is being
22 covered -- an engineered cover. That cover will be
23 adequate containment for that type of
24 contamination. It doesn't have the potential to
25 migrate and the cover will protect anybody from

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1 external radiation. That is the only path that
2 we're concerned with, so it's a little different in
3 that regard, perhaps.

4 MR. SIMPSON: Any other comments?
5 Okay. I would just like to remind people that the
6 comment period closes -- or ends December 22nd.
7 And up until that time we will offer briefings for
8 anyone that is interested, and you may mail in any
9 comments. I have postage-paid comment forms here.

10 They wanted me to remind you that we
11 have basically extended the comment period already
12 in anticipation of public interest that we've had
13 so far. It's been very good public interest.

14 Also, I would just like to state that
15 the next time we will be holding public clean-up
16 meetings will be in the spring when we will be
17 discussing Waste Area Group 5. Their Remedial
18 Investigation and Feasibility Study in Waste Area
19 Group 5 is the Power Burst Facility and the
20 Auxiliary Reactor, and also Waste Area Group 4, and
21 the Central Facilities Area.

22 Thank you for the reminder, Ann. I
23 mentioned this earlier, the agencies have released
24 a revised proposed plan for Waste Area Group 1 and
25 that was based on public comment to do such. I

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1 believe the comment period for that starts
2 November 23rd. We don't have copies yet. It will
3 be mailed out tomorrow.

4 AUDIENCE MEMBER: The comment period
5 ends November 23rd?

6 MR. SIMPSON: No, it begins November
7 23rd.

8 MR. JENKINS: I would just like to thank
9 all you folks for coming out and taking the time
10 out of your evening to come and talk with us and
11 let us know what you think. With that, I'll turn
12 it over.

13 MR. PIERRE: I second what Talley said.
14 Please remember that there is a postage-paid
15 comment form in the back of the proposed plan.
16 Again, just your thoughts, if not a detailed
17 opinion, whatever you think would be helpful to us
18 in trying to work out these issues and trying to
19 achieve a consolidated master plan on how to manage
20 the Idaho National Engineering Laboratory.

21 MR. RENO: Ditto. Drive careful.

22
23 (Meeting concluded at 9:05 p.m.)
24
25

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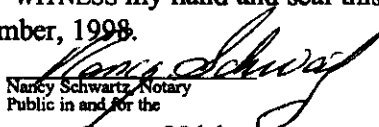
1
2 STATE OF IDAHO }
3 County of Ada) ss.
4

5 I, NANCY SCHWARTZ, a Notary Public in
6 and for the State of Idaho, do hereby certify:

7 That said hearing was taken down by me
8 in shorthand at the time and place therein named
9 and thereafter reduced to computer type, and that
10 the foregoing transcript contains a true and
11 correct record of the said hearing, all done to the
12 best of my skill and ability.

13 I further certify that I have no
14 interest in the event of the action.

15 WITNESS my hand and seal this 30th day
16 of December, 1998.

17 
18 Nancy Schwartz, Notary
19 Public in and for the
20 State of Idaho

21 My commission expires:
22 September 28, 1999
23
24
25

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